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ABSTRACT

This paper identifies some recent dimensions of labor market restructuring, based on an analysis of change in the United States economy. Information was drawn from a number of service industries, including retailing, telecommunications, insurance, banking, advertising, accounting, and other business services. Following an introduction that defines the nature and purpose of the paper, Section 2 reviews some of the key factors behind the transformation in the demand for labor. They include increasing the competition and the introduction of new technology--two of the main forces that have resulted in the trend towards "vertical disintegration" and the rise in the demand for "contingent labor." Section 3 examines some principal forces that have transformed the labor supply, including growth in the pool of available part-time workers, the rise in the number of two wage-earner households, and rising educational attainment. The paper also points to the response by firms to some of these forces and specifically to the trend toward the dismantling of internal labor markets. In Section 4, the emergence of new labor markets structured around segments of core and contingent workers is hypothesized. These new segments are shown to differ widely from the so-called primary and secondary labor segments characteristic of the industrial dualism of the post-war years. (KC)

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SERVICES AND THE NEW ECONOMY: TOWARD A NEW LABOR MARKET SEGMENTATION

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Occasional Paper No. 5

April 1988

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PREFACE

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1. Introduction

Advanced economies are in the midst of a major structural transformation, linked in part to the advent of the service industries. But there is more to the current transformation than simply growth of employment and output in the service sectors. Underlying the growth of the services are major changes in the ways in which production is organized and work is distributed through labor markets. As the reorganization of production proceeds, earlier labor market arrangements are being altered, including the very processes of segmentation specific to the postwar phase of economic development. Elsewhere, I have dubbed this period the phase of Industrial Dualism (Noyelle, 1986).

This paper is an attempt at identify some recent dimensions of labor market restructuring and is based on an analysis of change in the U.S economy. While I rely extensively on examples drawn from my own recent detailed work on a number of service industries, including retailing, telecommunications, insurance, banking, advertising, accounting and other business services (Noyelle, 1986; Bertrand and Noyelle, 1986; Noyelle and Dutka, 1987), work carried out by others in the United States confirm many of the dimensions of change identified here (for example, Christopherson, 1986; Christopherson and Storper, 1986; Bailey and Waldinger, 1985). In addition, it may be useful to note that recent comparative work on technological, skill, and labor market transformation in the service sectors of five countries, carried out under the auspices of the Center for Educational Research and Innovation of the Organization for Economic Development and Co-Operation, suggests that similar dimensions of change are underway elsewhere (CERI/OECD, 1986).

In Section 2 of this paper, I review some of the key factors behind the transformation in the demand for labor. They include increasing competition and the introduction of new technology. These are two of the main forces that have resulted in the trend towards "vertical disintegration" and the rise in the demand for "contingent labor." In Section 3, I examine some principal forces that have transformed the labor supply, including growth in the pool of available part-time workers, the rise in the number of two wage-earner households, and rising educational attainment. I also point to the response by firms to some of these forces and, specifically, to the trend toward the dismantling of internal labor markets. In Section 4, I hypothesize the emergence of new labor markets structured around segments of core and contingent workers. These new segments are shown to differ widely from the so-called primary and secondary labor segments characteristic of the industrial dualism of the post war years (Doeringer and Piore, 1971).

2. Changing Labor Demand

Increasing Competition. Of the many factors that have acted to transform the structure of markets in recent years, the revival of competition has to be the most important one. Growing internationalization and deregulation--two trends that gained momentum during the late 1970s and early 1980s--usually are seen as the principal causes for this renewal of competition. In retrospect, however, incipient tendencies often emerged earlier, either in the identification by firms of previously, underdeveloped markets or in their response to the saturation of traditional markets. As firms broke away from

the old markets, often increasingly oligopolistic in nature, new competitive situations emerged.

In the department store industry, for example, the revival of competition can be traced back to the late 1950s and early 1960s, once consumer demand had recovered fully from the war and as the trend towards suburbanization gained in speed (Bluestone et al., 1981; Noyelle, 1986). Suburbanization, in particular, by shifting the locus of demand to new locations pried retailing markets open to new competition. Department stores--up to that point mostly downtown, local institutions with few competitors--quickly found themselves competing against each other as most saw in this development an opportunity to branch outside their own local market. Thus, even though the concentration of sales in the industry's largest firms increased during those years, competition bloomed as new markets, previously protected or largely undeveloped, opened up to competition.

In consumer banking, inflation and a tightly regulated pricing structure helped to spur the transformation of an increasingly saturated market in the mid and late 1970s. As inflation rose and as the gap between the interest charged by the banks and that paid out to depositors widened, consumers began searching for better returns on their money, which they found in the mutual funds. This, and the attempt by brokerage houses, with Merrill Lynch in the lead, to link brokers' accounts to credit lines and charge cards as a means to add liquidity to individuals' investment funds, resulted in a massive shift of savings away from the banks towards investment banking institutions. Within a few years, a massive process of deregulation was unleashed and a fundamental restructuring of consumer banking markets set in motion, with an emphasis on product diversification, cross-selling and customization of services, rather than sheer quantitative growth (i.e. finding new customers for the same, traditional banking products).

Similar examples abound in other service areas. An interesting observation is that, in many instances, the resurgence of competition went hand-in-hand with continued market concentration. What disappeared were natural oligopolistic and/or regulatory barriers restricting price, product, or geographic service areas--making it possible for additional players to enter markets, without necessitating economies of scale or economies of scope by competitors. While in a sector such as air transportation, competition may again be weakening as a result of continued concentration, in most others it seems reasonable to argue that the new-found competition will endure. This is likely to remain true in part because the increasing integration of markets on a world scale, including in the services, will most likely continue to bring in new competitors.

Technological Change. Another important dimension underlying the recent transformation in labor demand is the advent of new information technologies, especially that of the latest generations of computer technologies, characterized by potentially enormous flexibility. In terms of the argument presented in this paper, the introduction and diffusion of these new technologies have, at the minimum, two important implications. First, they hold tremendous potential for altering old products, developing new ones and transforming relationships between firms and clients. And second, they open

new opportunities for reorganizing the division of labor, with a direct impact on the firm's skill structure, and therefore, on its demand for labor.

A banking product such as the credit card could hardly have diffused as widely as it did, had it not been for the development of computer technology. It is not that the bookkeeping tasks associated with the product itself could not have been carried out without computers, but simply that no bank could have ever built the clerical support organization necessary to process such a product at a reasonable cost. To a very large extent, this is true of many areas of the services whose recent expansion has been built largely around computerized systems, ranging from airline reservations systems, to product systems in insurance, ordering and inventory systems in retailing, or parcel tracking systems in the new express air courier business. Put another way, this also means that information technologies have helped pave the way for new entrants in a number of sectors as they contributed to altering fundamentally the ways and costs of doing business.

In addition, largely thanks to the new technology, traditional service production work is being either eliminated, or reintegrated as an adjunct to sales and service assistance work, or simply passed along to customers. Consumers can now use ATMs to process their own cash withdrawals, deposits, and transfers in the same way that merchandise buyers in department stores can process orders for suppliers directly on-line. In the process, the need for back-office bank clerks or stockroom clerks in stores is diminishing greatly. In turn, because of the demands of the new competition and because of the potentially enormous flexibility of the new systems, the pressure to expand the scope and complexity of sales and service assistance work is building considerably. In short, production workers are decreasing in numbers while the remaining labor force is increasingly needed either to sell, to assist customers or to develop new products, new markets, and new strategies. The upshot is considerable upskilling and not unlikely a shift towards activities that demand high-levels of technical expertise, often only loosely related to the particular firm or sector (e.g., systems engineering, computer programming, telecommunications engineering, legal expertise, systems accounting, product research, marketing, advertising, and so forth).

Together, growing competition and technological change are playing a major role in bringing about the trend towards "vertical disintegration" and in fostering demand for "contingent labor."

Vertical Disintegration. Disintegration, which in actuality can be either vertical or horizontal, refers to the tendency among firms to externalize (i.e., return to the marketplace) transactions formerly carried out internally (i.e., within the firm). It can involve transactions relating either to service or goods inputs or to labor inputs. To a very large extent, disintegration is a by-product of the revival of competition, as firms find it increasingly difficult to shelter less-than-market-efficient transactions behind monopolistic rents.

While the concept of disintegration was first developed as a way to describe the breakdown of vertically integrated firms in manufacturing (Piore and Sabel, 1984), it has remarkable applicability to the case of the service

industries. Indeed, as Christopherson and Storper have shown, the U.S. motion picture industry provides perhaps the most extreme example of disintegration (Christopherson and Storper, 1986; Christopherson, 1986). From an industry that used to be organized around the studio concept and in which the largest studios "owned" everyone and everything needed to make movies--including writers, producers and actors under long-term contracts--movie making by the studios underwent a fundamental transformation during the 1960s and 1970s as a result of growing competition from the television networks and from independent producers. Today, the largest studios are shadows of their former selves and act mostly as producers. The industry has been reconstructed as a project-oriented sector. The key participants work mainly for small firms or as independent contractors, with producers assembling a combination of writers, actors, stagehands, technicians, equipment leasors and other suppliers for a particular project.

Similar tendencies are found in many other service industries. Note here that the trend toward disintegration need not contradict the need for scale economies and is not inconsistent with the survival of large firms, as is the case in banking, air transportation, accounting, or retailing. What is happening, however, is that the most successful large firms are increasingly those that are becoming more and more specialized. Furthermore, specialization is increasingly being achieved by focusing on market segments rather than on products, partly in response to the breakdown of the mass market. In banking, for example, the most successful firms are often to be found among those that have redefined their missions around a few well-defined market segments. Firms like Sears Roebuck, whose strategies continued to be based on assembling wide-ranging, highly integrated institutions offering everything from shoes and tires to life insurance and brokerage accounts, are finding it more and more difficult to operate profitably. Indeed, in several of the banks that my colleague, Olivier Bertrand, and I studied as part of a research project for the OECD, we found an increasing emphasis on running operating units on a profit center basis, speeding the trend toward disintegration (Bertrand and Noyelle, 1986). In perhaps the most extreme case that we were able to study, each profit center of the bank was let free to purchase externally anything that it needed to conduct its business, ranging from training courses to systems engineering, computer processing services, and even the funds necessary to finance its assets. In the airline industry, so far no firm has succeeded in developing the often predicted synergy between air transportation and hotel accommodation. By comparison, large U.S. airlines have been very successful in integrating small regional "feeder" carriers into their larger operations.

The Rise in the Demand for Contingent Labor. As noted earlier, the other dimension of disintegration is the tendency by firms to externalize labor needs, namely the increasing demand for contingent labor. Perhaps the simplest definition of contingent labor is a labor force that employers can use flexibly with respect to fluctuations in product or service demand. Contingent employment can cover situations in which employers have either an extremely weak or a relatively strong contractual attachment to contingent workers--ranging from low wages and no benefits to high wages, high benefits. In her paper, "The Origins of Contingent Labor in Changing Production Organization," Susan Christopherson (1986) develops two typologies--one

covering some of the principal forms taken by contingent work; the other, some of the principal models of vertical disintegration by groups of industry--and shows how the use of different kinds of contingent labor varies depending on how firms in a particular group of industries are being disintegrated.

For the purpose of this paper, it is sufficient to point to Christopherson's four principal forms of contingent labor: seasonal part-time, permanent part-time, temporary, and independent individual contracting. The first form of contingent work is likely the oldest of all and involves the hiring of labor to cope with extraordinary peak output levels. Typically, employers resort to such hiring when all possibilities of obtaining extra over-time work from the firm's permanent employees have been exhausted.

The second form of contingent work is associated with jobs that have been designed to be staffed permanently on a part-time basis. Peak-shifts in banking or retailing are quintessential examples of such contingent work. Typically, these permanent part-time positions are by regular employees. In the department store industry, the use of permanent part-time employees became widespread as far back as the early 1960s. In the banks, it has emerged mostly in the late 1970s.

The third form of contingent work relates to situations in which a given firm turns to another one to hire trained labor on a short-term basis. Temporary agencies cover the whole gamut, from secretarial help to nursing or engineering. Employment via temporary agencies has grown extremely rapidly in recent years. According to Mayall and Nelson, quoted in Christopherson (1986), approximately 760,000 workers are employed as temporaries at any one time today, but more significantly between 2 and 3 million people work as "temps" at some time during a given year. This compares to 20,000 people employed by the temporary agency industry in 1956.

The last form of contingent work covers independent individual contractors, that is, the growing number of self-employed, mostly professionals or paraprofessionals who sell their expertise to individual firms, usually on a project basis.

While contingent work finds some of its roots in the transformations described thus far, it would be wrong to fail to see that changes in the labor supply have also fueled its development. In the next section of the paper I review three such changes--the growth in the supply of part-time workers, the rise in the number of two wage-earner households and the rise in the educational attainment of the labor force--and their impact on the trend towards the dismantling of internal labor markets.

3. Changing Labor Supply

The Growing Supply of Part-Time Workers. Even though a substantial proportion of part-time employment in the U.S. represents involuntary part-time (approximately a fourth) and even though a majority of part-time jobs created over the past 2 years or so qualifies as involuntary part-time (according to the U.S. Bureau of Labor Statistics definition), it would be

mistaken not to concede that the growth of part-time employment is in part a result of changes in the labor supply.

First, between 1965 and 1985, women's participation in the U.S. labor force rose from 36.7 to 54.5 percent, when measured as a percentage of the total female work-age population. This compares to far lesser gains during the previous 20 years as women's participation rate grew from the low to the high 30 percentage points (U.S. Department of Labor, Employment and Earnings, various years). To a significant extent, this increase in women's participation has come in the form of demand for part-time employment during child-bearing and child-raising years. Likewise, the lengthening of secondary and post-secondary education has contributed to increasing demand for part-time employment by youths. Finally, in a society in which life expectancy has risen, demand for part-time employment beyond the early or mid-sixties has grown and has potential to grow considerably in years to come. Together, these and other factors have helped push the demand for part-time employment.

Not surprisingly then, many instances of firms reorganizing their employment systems by introducing extensive use of permanent part-time employment can be seen as a response to the evolving structure of the labor supply. The extensive introduction of permanent part-time employment by the department store industry when it first moved out to the suburbs was dictated largely by the perception that the principal, underused supply of labor in those areas was homebound housewives (Noyelle, 1986). Likewise, work in the food supermarket sector was reorganized during the 1970s and early 1980s around the introduction of short-hour shifts (four hours or less daily) in large part to attract school-aged, youth labor (Bailey and Waldinger, 1986).

The Rise in the Number of Two Wage-Earner Households. As women's participation in the labor force grew, so did the number of two wage-earner households. Between 1965 and 1985, the proportion of households with two adults and with more than one wage-earner grew from roughly 47 to over 70 percent (U.S. Department of Labor, Employment and Earnings, various years). In a country where social benefits are typically linked to one's job but can be extended to other members of the employee's family, the rise in the proportion of two wage-earner households introduces an important element of flexibility on the labor supply side, as an individual within a given household may be willing to trade medical and other benefits for convenience and/or cash as long as he or she is covered by another member of the household.

Rising Educational Attainment. A third major change in labor supply is the dramatic rise in the educational attainment of the U.S. labor force. This has come as a result of the massive post-war investment in secondary and post-secondary education. In 1985, approximately 45 percent of those between the ages of 25 and 29 had one year or more of college education. Half of those had completed a four-year college education. These numbers must be compared to those for 1965, when less than 20 percent of those in the same age bracket had some college education.

These later developments, perhaps more than any other factor, have had a powerful impact on fueling the trend toward the dismantling of internal labor markets discussed below.

The Dismantling of Internal Labor Markets. By changing the makeup of the labor supply, the expansion of the educational system has put enormous pressure on firms to adjust their hiring and employment opportunity structure to the new availability of a labor supply increasingly differentiated by levels and types of education. Their response, for the most part, has been an increasing reliance on the external labor market where firms can now find workers at different levels of preparedness. From mostly single-entry point organizations, most firms have evolved towards multiple-entry structures as they have discovered that they no longer need to shoulder the entire cost of kill formation through internal labor market structures (see Noyelle, 1986, especially Chapter 3).

At first, this change was felt most strongly at the level of junior managerial and professional personnel as firms turned to four-year colleges to hire entry-level candidates while abandoning systems of internal ladders that were once the main route to access these and higher-level positions. Under the new arrangement, no longer can a sales clerk expect to become a buyer for a major retailer, a bank teller to become a bank officer, or a messenger to become an insurance executive simply by moving up the ranks.

In Beyond Industrial Dualism (1986), I have documented the systematic dismantling of internal labor markets in one sector after another. While I found this development already in the making as far back as the 1960s, it is clear that the 1970s represented a turning point, as the impact of several decades of expansion in the educational system and the coming of age of the baby-boomers were felt massively on the labor supply side. In addition, I found that recent growth in two-year college education has provided yet another way to cut off the lowest-skilled jobs from the middle-skilled positions of paraprofessionals and technicians, while increases in the numbers of candidates from graduate university programs (five and six years after high school) have led to further segmentation at the top.

4. Beyond Industrial Dualism: Towards a New Labor Market Segmentation

Together, the changes described in this paper suggest a restructuring of labor markets around three major segments: core workers, skilled contingent workers, and unskilled contingent workers. In the following paragraphs, I will delineate some of the contours of these new segments and identify the principal differences between this emerging segmentation and that which characterized the period of Industrial Dualism.

Core Workers. While firms are attempting to minimize the number of workers to whom they are committed by increasing their reliance on contingent workers, they must, nevertheless, continue to rely on a core of workers who can develop, carry out and convey to others the strategic message of the organization. Increasingly, this core is shrinking to accommodate only a

selected group of mostly professional and managerial workers. Alone they continue to enjoy mobility opportunities within the firm. Less and less does this core include the growing number of specialized professionals, whose field of expertise, while needed, is often linked only indirectly to the primary mission of the organization. More and more, these professionals are being dealt with on a contingent basis. In banks, insurance companies, local telephone companies, retailing organizations and yet other service firms, core workers are usually recruited carefully to match the special characteristics of the firm and are then placed in restricted trainee programs (Noyelle, 1986; Bertrand and Noyelle, 1986). Others are integrated into the core on an ad-hoc basis, having joined the firm originally under contingent terms.

While the intent is often to remove as many medium- or low-skilled workers as possible from the reach of the internal labor market structure, all such workers are not necessarily excluded. Indeed, in both retailing and insurance, I discovered that, as firms reorganized their internal labor markets, they often found it necessary to preserve a relatively stable, if small, pool of core workers in clerical and low level supervisory positions. Short of this, high turnover resulted in no one ever knowing enough about the firm's way of doing things. One department store, for example, which at first had eliminated many of the low level supervisory positions that it once used to move employees from sales floor into junior and middle management positions, reintroduced a few such positions after years in order to move a few selected salesclerks through the ranks (Noyelle, 1976, especially Chapter 3).

Skilled Contingent Workers. This second major labor market segment includes a wide spectrum of individuals with skills mostly of a professional or paraprofessional nature, ranging from specialized nurses working in intensive care units to systems analysts, programmers and other specialists designing computerized systems. While this segment finds its origins partly in traditional professions and crafts--teachers, lawyers, accountants, etc.--the number and variety of those involved have multiplied considerably over the past two decades or so.

Workers in this segment are driven mostly by professional objectives and standards, rather than by firm-based criteria. Mobility among skilled contingent workers is achieved at least as much through lateral job-hopping and additional education and training as through moves within a given firm. This is so, in part, because the range of experiences that an individual must accumulate in order to develop his or her expertise is likely to be much larger than that which a single firm can offer. Turnover in jobs filled by skilled contingent workers is high, and jobs are usually offered with the understanding that the firm's commitment is short-term. In short, the role of user-firms in organizing this part of the labor market is decreasing, while that of professional organizations, educational institutions, professional and personnel networks is growing. Also growing is the importance of organizations whose role is to structure the supply of such labor and interact with user-firms. Nurse registries, head-hunters or even specialized temporary agencies are examples of such organizations.

For example, in our research for CERI/OECD, Olivier Bertrand and I discovered that for all practical purposes, the labor market for security traders--comprising a few thousand individuals, mostly graduates of U.S. and European Business Schools--was becoming increasingly organized by a few large head-hunting firms keeping close track of job openings and potential candidates on a global basis. In the most extreme cases of job mobility, this might mean that a top performing trader working, say, for a bank in Paris might receive a phone call from a London-based head-hunter one day and find him or herself accepting a job offer in Chicago or Singapore the next day.

Within the United States, networks of skilled immigrants appear to be another means of channelling selected individuals to certain classes of jobs. For example, a growing proportion of engineers employed in aerospace industry on the West Coast are East Indian or Pakistani. Likewise, in nursing, there is a large inflow of Filipino and South Korean professionals.

By comparison to the segment of unskilled contingent workers described next, skilled contingent workers usually are able to maintain sufficient control over the supply of their own expertise and shelter themselves from unbridled competition. The implication, of course, is that they can exert some control over wage and benefits. Professional licensing, restricted access to educational programs, and sheer specialization are the traditional ways to enforce such control.

Unskilled Contingent Workers. Paralleling the growth of skilled contingent work is the further expansion of unskilled contingent work. To a large extent, this group of workers has always existed. What is new, however, is that groups of workers which, despite their limited skills, were once part of the internal labor market are increasingly being relegated to this lower tier of the labor market. The inability of traditional unions to develop a strategy to respond to this weakening of status and labor market sheltering of jobs once structured as entry positions into the firm's employment ladder is important in understanding the increasingly tenuous nature of low-skilled jobs.

Consistent with this weakening of status, a growing proportion of unskilled contingent work is structured to accommodate part-time employment. Youth, groups of women, and low-skilled immigrants provide the bulk of its labor force.

Some Differences from Earlier Segmentation. The new labor market segmentation hypothesized in this paper stands in sharp contrast with that characteristic of the earlier industrial period.

During the period spanning roughly from the 1920s to the 1960s, there had emerged a structural dichotomy between a core economy comprising mostly large firms and a peripheral economy dominated by small employers. Within the core economy (e.g. steel, automobile, chemicals, etc.), large firms tended to operate in an oligopolistic environment, where profits and employment were sheltered from the worst possible impacts of the business cycle. By comparison, firms in the peripheral economy faced a far more volatile, competitive environment. They typically bore the brunt of the business

cycle. Out of this market-based dichotomy, a particular structure of labor market segmentation had arisen. Ceteris paribus, workers employed by large employers in the core economy (the primary labor market) faced far better prospects for long-term improvement in earnings and job mobility than those hired by firms from the peripheral economy (the secondary labor market).

The observations presented in this paper suggest the emergence of a new labor market dynamics. Under this new dynamics, the firm's role in structuring labor markets is weakening, except perhaps for a group of core workers, many of whom are employed in professional and managerial echelons. In addition, under the new dynamics, size-of-firm differences are increasingly less important in structuring labor segments. In a market environment where both small and large firms are confronted with far greater competition than in the past, fewer firms can now hide behind oligopolistic arrangements. In contrast, the very nature of skills is increasingly at the origins of segmentation, at least between core and skilled contingent workers. Where skills are somewhat generic and demanded by a broad array of firms, workers who can supply them are increasingly likely to be organized on a contingent basis; where skills remain highly firm-specific, their supply is likely to remain internalized among a group of core workers.

A major issue is how fast these two groups are growing relative to the third group, that of unskilled contingent labor. The answer to the question lies in part in one's assessment of how rapidly computerization will eliminate many of the most menial tasks of the economy. In my opinion, this process of low-skilled job destruction may already be progressing faster than our society can cope with. This is based simply on the observation that recent unemployment rates, including during periods of expansion, have remained historically higher than those of the 1960s, and that the burden of unemployment has fallen mostly on the least educated. In other words, we no longer produce enough low-skilled jobs to satisfy large numbers of underprepared, undereducated and underskilled workers.

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